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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,818	03/14/2002	Iqbal Grewal	P1824R1	2744

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EXAMINER	
GAMBEL, PHILLIP	

ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/099,818	GREWAL, IQBAL	
	Examiner	Art Unit	
	Phillip Gambel	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *19-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment, filed 2/28/06, has been entered.
Claims 1, 9, 11-14 and 15-18 have been amended.
Claim 31 has been added.

As pointed out in the previous Office Action, applicant's election of Group I (claims 1-18) and the species of a CD40-specific antibody and a CD20-specific antibody as well as multiple myeloma in the reply filed on 11/14/05 was acknowledged.

Also, as pointed out previously, claims 1-18 and 31 are under consideration in this application as they read on CD40-specific antibodies and CD20-specific antibodies as the specific agents as well as the various neoplastic diseases claimed in the interest of compact prosecution.

Claims 19-30 have been withdrawn from consideration as being drawn to the non-elected species.

2. The text of those sections of Title 35 USC not included in this Action can be found in a prior Action.
This Action will be in response to applicant's amendment, filed 2/28/06.

Given applicant's newly amended claims which now recite "a CD40 agonist", New Grounds of Rejections have been set forth herein.

3. Given applicant's newly amended claims which now recite "a CD40 agonist" and the new matter issues under 35 USC 112, first paragraph, presented herein,
the priority of the instant claims is no longer deemed to be the filing date of the priority application USSN 60/280,805, filed 4/2/01.

4. Claims 1-18 and 31 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Given applicant's amended claims, the previous rejection under 35 U.S.C. § 112, second paragraph, with respect to the recitation of "S2C6" and "C2B8" has been applied to the newly amended claims 11, 12, 15 and 18 for the reasons set forth herein.

B) Claims 11, 12, 15 and 18 are indefinite in the recitation of "rituximab" and "S2C6" because its their characteristics are not known. The use of "S2C6" and "rituximab" monoclonal antibodies as the sole means of identifying the claimed antibodies renders the claims indefinite because these are merely laboratory designations which do not clearly define the claimed products, since different laboratories may use the same laboratory designations to define completely distinct cell lines.

Amending the claims to recite the appropriate ATCC Accession Numbers would obviate this rejection.

Applicant's reliance upon amending the claims to recite partial variable light and heavy domain sequences of the "S2C6" antibody does not provide the sequences of the entire "S2C6 antibody".

Applicant is reminded that the identification of the entire immunoglobulin via deposit of biological materials or reciting the entire immunoglobulin sequence of the claimed antibody would obviate this rejection.

C) Claims 15 and 18 contain the trademark or trade name "rituximab". Where a trademark or trade name is used in a claims as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 USC 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark or the trade name "rituximab" is used to identify or describe "an antibody", and accordingly, the identification or the description is indefinite. The relationship between a trademark or tradename and the product it identifies may be uncertain and arbitrary. The formula or characteristics of the product may change from time to time and yet it may continue to be sold under the same trademark or tradename.

Applicant is invited to clarify whether "rituximab" is a trademark or trade name.

D) Claims 1-18 and 31 are indefinite in the recitation of "a CD40 agonist" because the nature and parameters of the claimed "agonistic properties are not recited and, in turn, are ill-defined to apprise the ordinary artisan of the metes and bounds of the claimed invention.

For example, column 3, paragraph 2 of Siegall et al. (U.S. Patent No. 6,843,989) notes that:

"Although competition studies have shown that G28-5 and S2C6 bind the same or proximal epitopes, the antibodies have been determined to be functionally different based primarily on the magnitgude of stimulation achieved by either mAb on previously stimulated tonsillar B cells."

In response to the prior art rejections, applicant's amendment, filed 2/28/06, submits that the prior art taught antagonistic anti-CD40 antibodies.

However, as indicated below, the prior art as well as the instant specification acknowledges that the prior art anti-CD40 antibodies were described as agonistic anti-CD40 antibodies, that is, antibodies mimic the biological effects of CD40L are useful in the treatment of disease characterized by neoplastic cells that express CD40 such as B lymphomas, melanomas and carcinomas,

Applicant should amend the claims to recite the appropriate properties that define a "CD40 agonist".

E) Claims 11-12 are indefinite in reciting SEQ ID NOS., given that there is no Sequence Listing for the instant application and that the instant application is not in sequence compliance.

F) Applicant is reminded that the amendment must point to a basis in the specification so as not to add any new matter. See MPEP 714.02 and 2163.06

5. Claims 11, 12, 15 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is apparent that the "S2C6" and "rituximab" antibodies are required to practice the claimed invention. As required elements, they must be known and readily available to the public or obtainable by a repeatable method set forth in the specification. If they are not so obtainable or available, the enablement requirements of 35 USC 112, first paragraph, may be satisfied by a deposit of the pertinent cell lines / hybridomas which produce these antibodies. See 37 CFR 1.801-1.809.

In addition to the conditions under the Budapest Treaty, applicant is required to satisfy that all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of a patent in U.S. patent applications.

Amendment of the specification to recite the date of deposit and the complete name and address of the depository is required. As an additional means for completing the record, applicant may submit a copy of the contract with the depository for deposit and maintenance of each deposit.

If the original deposit is made after the effective filing date of an application for patent, the applicant should promptly submit a verified statement from a person in a position to corroborate the fact, and should state, that the biological material which is deposited is a biological material specifically identified in the application as filed, except if the person is an attorney or agent registered to practice before the Office, in which the case the statement need not be verified. See MPEP 1.804(b).

Alternatively, applicant is invited to provide for the public availability in compliance with 35 USC 112, first paragraph, for the claimed "S2C6" and "C2B8" antibodies.

Although applicant relies upon incorporation by reference to U.S. Patent No. 5,736,137 for satisfying the deposit requirements for the C2B8 / rituximab antibody, applicant did not make of record whether the requirements for the deposit of biological materials, namely the C2B8 / rituximab antibody herein, have been satisfied with respect to 35 USC 112, first paragraph.

Similarly, applicant relies upon the commercial availability of the C2B8/rituximab antibody.

However, applicant did make of record the commercial availability without restrictions in the instant application.

With respect to the S2C6 antibody, applicant is reminded that the sequence of an entire immunoglobulin satisfies the biological deposit of said immunoglobulin. Note that satisfaction for the biological deposit of the specific S2C6 antibody requires the disclosure and recitation of its entire amino acid sequence and not based upon partial sequences.

6. Specification: The amendment filed 2/28/06 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention.

The added material which is not supported by the original disclosure is as follows:

"S2C6 comprises VL amino acid sequences of SEQ ID NO: 1 and SEQ ID NO: 2 and the VH amino acid sequences of SEQ ID NO. 6 and SEQ IDNO: 7 of WO 00/75348" on page 20 of the instant specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

7. This is a written description / new matter rejection under 35 U.S.C. § 112, first paragraph.

Claims 11-12 are rejected under 35 U.S.C. § 112, first paragraph, as the specification does not contain a written description of the claimed invention, in that the disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed.

The specification as originally filed does not provide support for the invention as now claimed:

"S2C6 comprises VL amino acid sequences of SEQ ID NO: 1 and SEQ ID NO: 2 and the VH amino acid sequences of SEQ ID NO. 6 and SEQ IDNO: 7 of WO 00/75348".

Applicant's amendment, filed 2/28/06, asserts that no new matter has been added and directs support to certain pages and the disclosure of WO/00/75348 in the instant specification as filed.

However, applicant is reminded that to incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where the material is found in the various documents. See Advanced Display Systems, Inc. v. Kent State Univ., 54 USPQ2d 1673 (Fed. Cir. 2000) citing In re Seversky, 177 USPQ 144, 146 (CCPA 1973).

Here, while the specification as filed (e.g. page 45) does refer to the S2C6 antibody there is insufficient direction to the particular "recitation / limitations" indicated above as they read on defining the S2C6 antibody by variable heavy and light chain amino acid sequences. .

Applicant is reminded of the following with respect to incoroporation by reference.

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See In re Hawkins, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); In re Hawkins, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and In re Hawkins, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

An application as filed must be complete in itself in order to comply with 35 U.S.C. 112; however this does not bar incorporation by reference. Ex parte Schwarze, 151 USPQ 426 (Bd. of Appeals, 1966). an application for a patent when filed may incorporate "essential material" by reference to (1) a United States patent or (2) an allowed U.S. application, subject to the conditions set forth below. "Essential material" is defined as that which is necessary to (1) support the claims, or (2) for adequate disclosure of the invention (35 U.S.C. 112). "Essential material" may not be incorporated by reference to (1) patents or applications published by foreign countries or regional patent offices, to (2) non-patent publications, to (3) a U.S. patent or application which itself incorporates "essential material" by reference or to (4) a foreign application. See In re Fouche, 169 USPQ 429; 439 F.2d 1237 (CCPA 1971).

Nonessential subject matter may be incorporated by reference to (1) patents or application published by the United states or foreign countries or regional patent offices, (2) prior filed, commonly owned U.S. applications or (3) non-patent publications, for purposes of indicating the background of the invention or illustrating the state of the art.

Here, it appears that applicant is attempting to incorporate by reference to essential subject matter to patents or applications published by foreign countries or regional patent offices and without sufficient direction to the specificity and particularity with the limitations currently recited by the instant claims.

Therefore, the specification as filed does not provide a written description or set forth the metes and bounds of this phrase. The specification does not provide blazemarks nor direction for the instant methods encompassing the above-mentioned "limitations" as they are currently recited. The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action.

Alternatively, applicant is invited to provide sufficient written support for the "limitations" indicated above.
See MPEP 714.02 and 2163.06

8. This is a written description / new matter rejection under 35 USC § 112 first paragraph.

Claims 1-18 and 31 are rejected under 35 U.S.C. § 112, first paragraph, as the specification does not contain a written description of the claimed invention, in that the disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed.

The specification as originally filed does not provide support for the invention as now claimed: "CD40 agonist".

Applicant's amendment, filed 2/28/06, asserts that no new matter has been added and directs support to certain pages and the disclosure of the instant specification as filed.

While the instant application does indicate that the particular anti-CD40 antibody S2C6 can enhance the interaction between CD40 and CD40L,
the instant specification as filed do not support the broader recitation of treating neoplastic diseases or disorders with "CD40 agonists" or even "agonistic CD40-specific antibodies" generically, as currently claimed.

There is no or insufficient description of a generic or subgeneric class of "CD40 agonists" or even "agonistic CD40-specific antibodies", wherein the ordinary artisan would have been apprised of the metes or bounds and/or scope of the claimed "CD40 agonists".

Applicant's reliance on generic disclosure and possibly a single or limited species (e.g. the S2C6 antibody) do/does not provide sufficient direction and guidance to the "features" currently claimed.

It is noted that a generic or a sub-generic disclosure cannot support a species unless the species is specifically described. It cannot be said that a subgenus is necessarily described by a genus encompassing it and a species upon which it reads. See In re Smith 173 USPQ 679, 683 (CCPA 1972) and MPEP 2163.05.

The specification as filed does not provide a sufficient written description or set forth the metes and bounds of this phrase. The specification does not provide blazemarks nor direction for the instant methods encompassing the above-mentioned "limitation" as currently recited. The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action.

Alternatively, applicant is invited to provide sufficient written support for the "limitation" indicated above.
See MPEP 714.02 and 2163.06

9. Applicant's arguments, filed 2/28/06, have been fully considered but have not been found convincing essentially for the reasons of record and in view of evidentiary references and New Grounds of Rejection with respect to applicant's amended claims and arguments associated with the recitation of "CD40 agonist".

Applicant's arguments rely upon amending the claims to recite "CD40 agonist" to obviate the anticipatory teachings as well as the obviousness teachings, particularly the motivation of the prior art.

However, as indicated herein in the rejections under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a) set forth herein;
given the broadest reasonable interpretation of "CD40 agonist" and that applicant and the art recognize that Hanna et al. does teach "agonistic anti-CD40 antibodies", that is, antibodies that mimic the biological effects of CD40L are useful in the treatment of disease characterized by neoplastic cells that express CD40 such as B lymphomas, melanomas and carcinomas, citing U.S. patent No. 5,674,492, which is referenced in paragraphs [0013] and [0104] of Hanna et al.).

As indicated below, Hanna et al. does teach agonistic anti-CD40 antibodies in the treatment of lymphomas.

10. Claims 1-18 are rejected under 35 U.S.C. § 102(e) as anticipated by Hanna et al. (US 2001/0018041 A1) (see entire document) essentially for the reasons of record and in further evidence of Armitage et al. (U.S. Patent No. 5,674,492 cited in paragraphs [0013] and [0104] of Hanna et al.), wherein said teachings of agonistic anti-CD40 are acknowledged by page 2, paragraph 1 of the instant specification and paragraphs [0005] and [0036] of Fanslow et al., US 2005/0129689 A1)

Applicant's arguments, filed 2/28/06, have been fully considered but are not found convincing essentially for the reasons of record and in further evidence of the instant specification and US 2005/01299689 A1) which recognize that certain antibodies referenced by Hanna were agonistic anti-CD40 antibodies.

Paragraphs [0013] and [0104] of Hanna et al. contemplates the anti-CD40 antibodies taught by Armitage et al. (U.S. Patent No. 5,674,492).

Armitage et al. teach agonistic anti-CD40 antibodies, including the M2 and M3 antibodies (See entire document).

For example, page 2, paragraph 1 of the instant specification discloses that:

"CD40 stimulation by mAb M2 and M3 inhibits growth of several B-cell lymphomas and induces regression of several B-cell lymphomas and induces regression of established tumors in vivo (Funakoshi et al., (1994) Blood 83: 2787-2794; Funakoshi et al. J. Immunol., (1996) 19: 93-101).

Fanslow et al. US 2005/0129689 A1) describes the antibodies referenced in U.S. Patent No. 5,674,492, namely the M2 and M3 antibodies as agonistic anti-CD40 antibodies as those antibodies that mimic the biological effects of CD40L are useful in the treatment of disease characterized by neoplastic cells that express CD40 such as B lymphomas, melanomas and carcinomas,

Again, certain anti-CD40 antibodies referenced by Hanna et al. are the agonistic anti-CD40 antibodies taught by U.S. Patent No. 5,674,492, which is referenced in paragraphs [0013] and [0104] of Hanna et al.

Therefore, Hanna et al. does teach the use of agonistic anti-CD40 antibodies, including its combination with anti-CD20 antibodies, in the treatment of B cell lymphomas and leukemias.

The following of record is reiterated for applicant's convenience.

Hanna et al. teach methods of treating B cell lymphomas and leukemias, including non-Hodgkin's lymphoma (NHL) (e.g. see paragraphs [0090] – [0101]) with the combination of CD40-specific antibodies (e.g. see CD40L Antagonists in paragraphs [0036] –[0078], and CD20-specific antibodies, including the C2B8 antibody / Rituxan (e.g. see paragraph [0104]) (e.g. see paragraphs Summary of the Invention, including paragraph [0018]; Detailed Description of the invention, including paragraphs [0088], [0092], [0104] and [0113]; Claims). Although the prior art does not teach the CD40-specific S2C6 antibody per se, the inhibitory CD40-specific antibodies taught by the prior art would have the same CD40 binding characteristics under the broadest reasonable interpretation of CD40-binding antibodies in the absence of limitations to the contrary.

It does not appear that the claim language or limitations result in a manipulative difference in the method steps when compared to the prior art disclosure. See Bristol-Myers Squibb Company v. Ben Venue Laboratories 58 USPQ2d 1508 (CAFC 2001

On this record, it is reasonable to conclude that the same patient in need is being administered the same neutralizing anti-CD40 and anti-CD20 antibodies to treat various neoplastic disorders and diseases by the same mode of administration in the same or nearly the same effective amounts in both the instant claims and the prior art reference.

Applicant's arguments have not been found persuasive.

11. Claims 1-18 and newly added claim 31are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hanna et al. (US 2001/0018041 A1) in view of Siegall et al. (U.S. Patent No. 6,843,989) and Grillo-Lopez (U.S. Patent No. 6,455,043) and in further view of Armitage et al. (U.S. Patent No. 5,674,492 cited in paragraphs [0013] and [0104] of Hanna et al.) and Benoit et al. (Immunopharmacology 35: 129-139, 1996) (1449; #59),
and in further evidence of the referenced teachings of agonistic anti-CD40 are acknowledged by page 2, paragraph 1 of the instant specification and paragraphs [0005] and [0036] of Fanslow et al., US 2005/0129689 A1).

Applicant's arguments, filed 2/28/06, have been fully considered but are not found convincing essentially for the reasons of record and in further evidence of the instant specification and US 2005/01299689 A1) which recognize that certain antibodies referenced by Hanna et al. were agonistic anti-CD40 antibodies.

See applicant's arguments and the examiner's rebuttal for the teachings of agonistic anti-CD40 antibodies, including the teachings of of Armitage et al. (U.S. Patent No. 5,674,492 cited in paragraphs [0013] and [0104] of Hanna et al.) and the acknowledgements by page 2, paragraph 1 of the instant specification and paragraphs [0005] and [0036] of Fanslow et al., US 2005/0129689 A1 that such anti-CD40 were considered agonistic anti-CD40 antibodies under the broadest reasonable interpretation of the claims.

Also, in contrast to applicant's arguments that there was no motivation to use employ the anti-CD40 antibodies of Siegall et al., the prior art does teach the use of agonistic antibodies, as discussed above.

Further, paragraph [0059] of Hanna et al. also teach antibodies that can regulate CD40 signaling as well as the use of antibodies to more than one epitope of CD40, which can be utilized together.

Therefore, the primary reference is not as limited as applicant's asserts.

In addition to relying upon agonistic anti-CD40 antibodies in the treatment of neoplastic diseases or disorders, Hanna et al. also teach regulatory anti-CD40 antibodies and the use of anti-CD40 antibodies that bind different epitopes as well.

While the M2 and M3 anti-CD40 antibodies may not meet new claim 31, the prior art provides sufficient motivation to employ different anti-CD40 antibodies, including the anti-CD40 antibodies taught by Siegall et al., which clearly meets the claimed recitation of both "CD40 agonists" as well as "wherein the CD40 agonist promotes the interaction between CD40 and CD40 ligand (CD40L)".

Benoit et al. has been provided to address applicant's arguments concerning motivation of combining agonistic anti-CD40 antibodies with anti-CD20 antibodies in the treatment of B cell lymphomas.

Benoit et al. teach the increased inhibition of proliferation of B cell lymphomas following litigation of CD40, and CD20, for example (see entire document, including Abstact and Discussion).

The anti-CD40 antibody was the known agonistic G28-5 anti-CD40 antibody (see Antibodies and reagents on page 130, column 2).

The following of record is reiterated for applicant's convenience.

Siegall methods of treating cancer, including leukemias, lymphomas (e.g. non-Hodgins lymphoma), solid tumor and multiple myeloma (e.g. see Therapeutic Uses, including Table 1 on columns 22-23 and Claims) with CD40-specific antibodies, including the S2C6 CD40-specific antibody of the instant invention (see entire document, including Claims)

Grillo-Lopez also teach treating various tumors with CD20-specific antibodies (See entire document) and teachings the expression of CD20 on multiple myeloma (e.g. see columns 15-16, overlapping paragraph) in addition to leukemias and lymphomas (e.g. see Field of the Invention on column 1 and Detailed Description of the Invention and Claims).

Given both the therapeutic use of CD40-specific antibodies and CD20-specific antibodies to treat various neoplastic diseases, including leukemias, lymphomas, myelomas and solid tumors, the ordinary artisan would have been motivated to combine the two antibody specificities as taught by Hanna et al. in combination therapies to target other neoplastic tissues in order to increase the efficacy of cancer treatment. AS taught by all of the prior art references, combination therapies, including combination with antibodies or combination of antibodies with more traditional chemotherapy and radiotherapy were well known and practiced by the ordinary artisan at the time the invention was made to increase efficacy of treatment and to minimize toxic effects of such treatment in order to meet the needs of the patients (see Detailed Descriptions of Hanna et al., Siegall and Grillo-Lopez). From the teachings of the references, it was apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

In response to applicant's arguments that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine 5 USPQ2d 1596 (Fed. Cir 1988) and In re Jones 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case the teachings of the prior art do provide for the use of agonistic anti-CD40 antibodies in the treatment of certain neoplastic disorders and diseases and do indicate success in treating neoplastic disorders and diseases with agonistic anti-CD40 antibodies in combination with CD20 binding that would have led one of ordinary skill in the art at the time the invention was made to combine the references to solve a well known problem in the art. The strongest rationale for combining reference is a recognition, expressly or implicitly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent that some advantage or expected beneficial result would have been produced by their combination In re Sernaker 17 USPQ 1, 5-6 (Fed. Cir. 1983) see MPEP 2144

Applicant's arguments have not been found persuasive.

12. No claims are allowed.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phillip Gambel, Ph.D., J.D.
Primary Examiner
Technology Center 1600
June 26, 2006